ABSTRACT OF THE DISCLOSURE

A method and a device for carburizing at subatmospheric pressures. According to said method, a treatment gas containing hydrocarbons is supplied to a treatment chamber and an exhaust stream exits said chamber. The opacity of the gas atmosphere that prevails in the treatment chamber and/or the opacity of the exhaust stream that exits said chamber is/are determined and the supply of the treatment gas containing hydrocarbons to the treatment chamber is regulated in accordance with the opacity that has been determined. If an opacity value that has been set or can be set is exceeded, the supply of the treatment gas containing hydrocarbons to the treatment chamber can be interrupted, or the quantity of treatment gas containing hydrocarbons that is supplied to said chamber can be reduced.